

Document Generated: 12/18/2025

Learning Style: On Demand

Technology: Cisco

Difficulty: Intermediate

Course Duration: 40 Hours

Introducing Cisco Nexus 9000 Switches in NX-OS Mode (DCINX9K) v2.1 - On Demand



Course Information

About this course:

This course will teach you skills to implement, manage, and troubleshoot Cisco

Nexus 9000 Series Switches in Cisco Nexus Operating System (Cisco NX-OS) mode.

A blend of virtual instructor led training, text based courseware, and extensive hands-on learning will help you learn deployment capabilities including Virtual Extensible LAN (VXLAN), Cisco Intelligent Traffic Director, troubleshooting tools and techniques, Cisco NX-OS programmability features, Multiprotocol Label Switching (MPLS), high availability features and open interface technologies. You will also be introduced to Cisco Data Center Network Manager (DCNM) for management.

Course Objective:

After taking this course, you should be able to:

- Describe MPLS Layer 3 VPN implementation on Cisco Nexus 9000 Series Switches
- Manage Cisco Nexus 9000 Series Switches using NX-API and Python
- Implement Cisco Intelligent Traffic Director
- Troubleshoot and manage Cisco Nexus 9000 Series Switches using Bash shell and Guest shell
- Manage Cisco Nexus 9000 Series Switches using Cisco DCNM
- Describe Cisco Nexus 9000 Series Switch software and hardware components
- Describe key Cisco Nexus 9000 Series Switch Cisco NX-OS software features
- Manage Cisco Nexus 9000 Series Switch configurations using Ansible
- Implement VXLAN BGP (Border Gateway Protocol) EVPN on Cisco Nexus 9000 Series Switches

Audience:

- Systems engineers
- Consulting systems engineers
- Technical solutions architects
- Field engineers
- Cisco integrators and partners
- Data center engineers
- Data center architects
- Network designers
- Network administrators
- Network engineers

Prerequisite:

You should have the following knowledge and skills to fully benefit from this course,:

- Understanding of Cisco data center architecture
- Experience configuring advanced routing and switching technologies such

- as BGP and Open Shortest Path First (OSPF)
- Good understanding of networking protocols, routing, and switching

These Cisco courses will assist you meet these prerequisites:

- Implementing Cisco IP Routing (ROUTE)
- Implementing Cisco IP Switched Networks (SWITCH)
- Introducing Cisco Data Center Networking (DCICN)
- Introducing Cisco Data Center Technologies (DCICT)

Course Outline:

- **Section 1: Describing Cisco Nexus 9000 NX-OS Solution**
- **Section 2: Implementing VXLAN in Data Center**
- **Section 3: Implementing MPLS in Data Center**
- **Section 4: Configuration Management, Automation, and Programmability**
- **Section 5: Cisco Nexus 9000 Topology Options**
- **Section 6: Troubleshooting Cisco Nexus 9000 Switches**
- **Section 7: Managing Cisco Nexus 9000 Switches with Cisco DCNM**